



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,089	09/26/2003	Dennis K. Fisher	ADO 0102 PA/40013.272	7058

7590 02/28/2006

DINSMORE & SHOHL LLP  
Suite 500  
One Dayton Centre  
Dayton, OH 45402-2023

EXAMINER
----------

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/672,089

Applicant(s)

FISHER, DENNIS K.

Examiner

Patrick D. Niland

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/12/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1714

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 5234987 Hubbard et al. in view of US Pat. No. 6268422 Weih et al..

Hubbard discloses the instantly claimed inventions with the exception of the use of water and the VOC of the instant claims. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the compositions of Hubbard in the form of low VOC aqueous dispersions because the EPA has regulated organic solvent emissions and because Weih shows that similarly hydrophobic rubber adhesives can be used in aqueous dispersion form which would have been expected to minimize the EPA regulated emissions.

Applicants argue that there is not motivation to combine the above references. The Motivation is in the EPA regulation of VOC emissions which have led the solvent based coating industry to form aqueous coatings in many instances. This is a heavy motivation. Hubbard need not acknowledge a need for VOC coatings to make a proper obviousness rejection. The argument that the references do not disclose the use of the instantly claimed amount of VOC in the solvent does not consider Weih's use of "stabilizing solvent" and the amounts thereof at column 3, line 56 to column 4, line 11 which encompasses the instantly claimed amount of VOC, particularly considering the motivation required by the above mentioned EPA regulations. The argument regarding water being used in emulsion polymerization is not understood. The water of the instant claims is not seen to behave differently than that of Weih. Water won't dissolve

Art Unit: 1714

the instantly claimed polymers. Thus “solvent” is seen as encompassing the dispersing medium of Weih particularly where Weih’s stabilizing solvent is used in the instantly claimed amounts. The cited section of Weih also points out the use of “stabilizing solvent”. Regarding claims 13 and 26, note that the amounts of water and stabilizing solvent of column 5, lines 7-15, pointed out by the applicant and column 3, line 56 to column 4, line 11 encompass these ratios. Not all claims require plasticizer. It is not stated to be required to reduce VOC and is thus encompassed in amounts which do not affect VOC in the instant claims. The applicant’s arguments are therefore not commensurate in scope with the instant claims and the cited prior art. The stabilizing solvent of the Weih is “plasticizer” as it lowers the Tg of the polymer, i.e. softens it. Water lowers the VOC, not the plasticizer which may be VOC, e.g. that new car smell. It is well known to the ordinary skilled artisan that “stabilizing solvent” softens the dispersed polymer particles allowing them to coalesce more readily. Note the well known definition of “coalescing solvent” of which the solvents of Weih are sometimes called. Plasticizer, by definition will give this softening, i.e. lowering of Tg, which will also contribute to easier coalescing at a given temperature, as will heating the final coating. Thus, there is not an unexpected result commensurate in scope with the cited prior art and the instant claims. “Obvious to try” is not the above used standard as the requisites of *Graham v. Deere* are clearly met. The examiner does not use EPA regulations alone but in combination with Weih showing that similar compositions are used in aqueous form. The applicant’s arguments regarding the examiner’s statement of EPA regulations alone is not persuasive therefore. The ordinary skilled artisan’s understanding of the EPA regulations which are well known in the coatings art at the time of the applicant’s invention and the use of water in Weih’s coatings combined shows the understanding of the need for using

Art Unit: 1714

low VOC. The applicant's arguments in this regard are therefore not persuasive. The benefits of the water solvent blend are clear from Weih calling such solvents "stabilizing solvents" and the well known definition of "coalescing solvents" in the art. Further, the applicant has shown no evidence regarding increased dry rate (not unexpected as the azeotrope has a lower heat of vaporization), reduced freezing point (not unexpected from freshman chemistry teaching of freezing point depression on adding something else to water and the definition of "antifreeze"), nor better surface wetting (this would depend on the surface and particular HLB of the solvent used but surfaces better wetted by the solvent used would expect to see this) in a manner commensurate in scope with the instant claims and the cited prior art. This rejection is therefore maintained.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

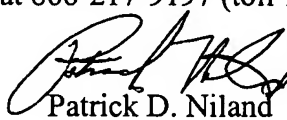
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1714

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland  
Primary Examiner  
Art Unit 1714